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REMARKS

In the Office Action mailed May 10, 2005, the Examiner rejected various claims as claiming non-statutory subject matter and all claims as anticipated by U.S. Patent No. 6,847,853 B1.¹ For the reasons discussed below, Applicants submit that these rejections are improper and should be withdrawn with respect to the currently pending claims.

At the outset, the Examiner rejected claims 1, 2, 5-12, 15-20, 36-37, 40, and 42-46 under 35 U.S.C. § 101 as being directed toward non-statutory subject matter. The Examiner states:

Claims 1, 2, 5-12, 15-20, 36, 37, 40, and 42-46 feature limitations that are abstract and are not limited to a practical application or use of the abstract ideas. A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. In this case, no such concrete, tangible and useful result has been claimed. See MPEP 2106 (IV).

Applicants have amended independent claims 1 and 36 to state that the method includes outputting the generated manufacturing process. Accordingly, Applicants respectfully submit that independent claims 1 and 36 result in something that is concrete, tangible, and useful.

The Examiner also rejected all of the claims under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,847,853 B1 to Vinciarelli et al. Regarding claims 1 and 36, the Examiner states:

As per instant claims 1 and 36, the designing of an assembly wherein at least two components engaged defines a contact area is taught at column 20, beginning at line 63. The system of Vinciarelli establishes a complement of modular power components to be realized in the power system device. The generation of a representation of the assembly is also done using the computer aided design facility wherein the configuration, shape and size of the mechanical package is determined, see col. 21:ll. 1-13.

Applicants respectfully submit that the '853 patent does not anticipate the presently

¹ The Examiner also rejected claim 22 as indefinite for being dependent from itself. Applicants have amended claim 22 to clarify the dependency of claim 22.

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pending claims. Applicants respectfully submit that the '853 patent does not disclose the step of assigning a manufacturing methodology to at least one contact area. Applicants respectfully submit that col. 20, line 63 of the '853 patent only discloses the use of a CAD (computer aided design) system to design a power converter. Specifically, the '853 patent states:

FIG. 5 shows a system block diagram of a computer aided design system 100 for configuring power supplies of the kind shown in FIGS. 2 and 9. The system 100 enables users to define and enter functional requirements such as voltage input, voltage outputs, output power levels, thermal environment, and certification requirements for the power system; establish a complement of modular power components such as DC-DC converter modules and front-end components to realize the power system; and define the configuration, shape, and size of the mechanical package for the power system, including the mounting arrangement of the power components on one or more metal mounting plates, as a means of meeting application-specific performance and configuration requirements. The outputs of the design system 100 include mechanical information necessary to machine, or otherwise fabricate, the metal substrate as well as information necessary to create means for connecting the input source to the module input pins and for making connections to converter output pins and other primary and secondary control pins.

('853 patent, col. 20, line 61- col. 21, line 13).

Nowhere in this portion of the '853 patent does it disclose assigning a manufacturing methodology to at least one contact area. Systems utilizing CAD design systems without assigning manufacturing methodology to contact areas require the designer to include the manufacturing methodology for every combination of components within the representations of each part such that part A and part B are programmed - how part A can engage part B is programmed into both part A and part B. This concept is described in more detail in Applicants' specification at page 8, ¶ 0022, which states:

Prior to employing the inventive method, in the case of designing and manufacturing a kitchen cabinet, for example, the methodology used to derive the machining/automation of this product would not only identify, for example, an end panel A, but within the identification of end panel A, would also identify instructions for all of the parts that would possibly come in

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contact with panel A. It would be predetermined what parts come in contact with the end panel, such that it would include instructions about if an end panel had a top shelf and bottom shelf, and it would include the machining instructions for the top shelf or the manufacturing instructions for the top shelf in the end panel description. Such instructions might be parametrically driven based on the width of the end panel or may be driven based upon some other factor.

By contrast, when one does not assign manufacturing methodologies for the engagement of two components to the components themselves, but instead assigns a manufacturing methodology to the contact area, the number of times the manufacturing methodology must be programmed by someone is reduced by at least half because each part does not carry the requisite manufacturing methodology for how to connect part A and part B when the parts engage one another. The contact area carries this information. Accordingly, Applicants respectfully submit that the cited patent at least does not disclose assigning a manufacturing methodology to at least one contact area. Therefore, Applicants respectfully submit that the pending claims are in condition for allowance.

The Applicants have made a concerted effort to place the present application in condition for allowance, and a notice to this effect is earnestly solicited. In the event there are any remaining formalities or other issues needing Applicants' assistance, Applicants request the Examiner to call the undersigned attorney at (616) 949-9610.

Respectfully submitted,

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